

Python GUI Development



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Part I: Overview of Business

John Deere is a world leader in providing advanced products and services and is committed to the success of customers whose work is linked to the land. I work at the ADV Lab that tests this equipment. This is one division that does R&D research, and soil compaction.

Part II: Job Specifics

The ADV Lab analyzes structural data to make sure the equipment is built correctly. If there is current machinery that is built and in the field they can take data directly from a tractor to better understand how that tractor is being operated by the operator. The problem I am solving is designing a GUI layout to help the engineers save time and discrepancies with the data they are getting from the machinery.

Part III: Introduce the Problem

- Currently when data is pulled from tractors to a server. They have a software program that pulls certain information but they do not have a fast way to pull more information from that data. I am tasked with creating the GUI interface to speed of the data gathering process to make the process for engineers easier, this process will save time and avoid any future mistakes.

Part IV: Background

- In order to solve this problem you must have a background in Python. Or another similar language.
- You need to understand the design process, and how to iterate the design.
- You must be familiar with the Agile design process.
- Individual needs to learn how to work through problems that are not evidently clear at the start or in the middle of the project.

Part V: Business Solution

- How would or did the business solve the problem? Yes and no. In the design process especially software development things are always changing and the ideas for what they wanted or goals can shift and that's called Agile development. I think I have given them a good framework for which they will be able to continually build off of.

Part VI: Student Solutions

- What solutions do you think students might come up with? I think I will give the students the design assignment. Make them stay in the constraints of the product and see what types of solutions they come up with.